

REMARKS

Claims 1-4 are now pending in the application. Claims 1-3 are amended herein. Claims 5-7 are cancelled herein. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

SPECIFICATION

The specification stands objected to for certain informalities. Applicant has amended the specification according to the Examiner's suggestions. Therefore, reconsideration and withdrawal of this objection are respectfully requested.

REJECTION UNDER 35 U.S.C. § 112

Claims 5-7 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. Claims 5-7 are cancelled herein. Accordingly, Applicant submits that this rejection has been rendered moot.

REJECTION UNDER 35 U.S.C. § 102 AND § 103

Claims 1-4 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kuronuma et al. (U.S. Pat. No. 5,831,646). Claims 2-4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kuronuma et al. in view of Fukushima et al. (U.S. Pat. No. 5,444,468). These rejections are respectfully traversed.

Claim 1 calls for a droplet jetting apparatus including a main body, a head unit having at least one droplet jetting head, a head unit support, a head unit moving

mechanism, and a head driving control section for controlling driving of the at least one droplet jetting head. Claim 1 further recites that “the head driving control section is provided on the head unit support so that the head driving control section is moved in a horizontal direction with respect to the main body by the head unit moving mechanism.”

As called for in claim 1, the droplet jetting apparatus of the present application includes the structural features that the head driving control section is provided on the head unit support so that the head driving control section is moved together with the head unit, and that the head driving control section controls driving of each of the droplet jetting heads based on the predetermined pattern data. According to these claimed structural features, since the head driving control section is located at a position very close to the head unit, it is possible to shorten the distance between the head driving control section and each of the droplet jetting heads. As a result, it is possible to suppress the generation of noise in the process of transmitting the predetermined pattern data (drawing pattern data) from the head driving control section to each of the droplet jetting heads and prevent the occurrence of jetting time lags or jetting misses or the like due to the noise. Furthermore, since it is possible to accurately control the driving of the droplet jetting heads, it is possible to draw patterns on the substrate with high accuracy.

In contrast with the present application, Kuronuma et al. discloses an ink jet printing apparatus including a control unit which receives a command signal and a data signal (printing information) and which drives and controls a printing head 1 through a driving circuit of a circuit board 26 provided on a carriage 16. (See, e.g., column 7, lines 36-45 of the Kuronuma et al. reference) However, the control unit is not disclosed as

being on the carriage 16. As such, Applicant submits that, in Kuronuma et al., no consideration is paid to shorten the distance between the control unit and the printing head 1. Furthermore, it is to be noted that in Figure 1 of Kuronuma et al. a connecting portion of the host apparatus 27 (which is indicated by an arrow) is directed to a portion other than a portion on the carriage 16.

Additionally, it appears that the Examiner considers that circuit board (driving circuit) 26 of Kuronuma et al. corresponds to the head driving control section called for in claim 1 of the present application. However, as can be seen in Figure 3 of Kuronuma et al., the control unit containing a CPU or the like is provided separately from the circuit board (driving circuit) 26. Therefore, Applicant submits that the circuit board 26 of Kuronuma et al. does not correspond to the head driving control section as claimed. Accordingly, for at least these reasons, Applicant submits that Kuronuma et al. does not anticipate claim 1.

Claims 2-4 depend on claim 1 and, therefore, for at least the same reasons, should also be patentable.

Applicant, therefore, respectfully requests reconsideration and withdrawal of these rejections.

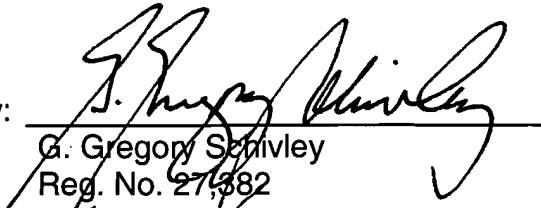
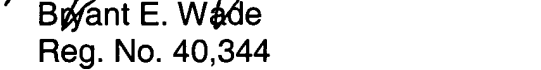
CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office

Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: May 15, 2006

By: 
G. Gregory Schivley
Reg. No. 27,382
By: 
Bryant E. Wade
Reg. No. 40,344

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

GGs/BEW/DWH/sms